

Claims

1. Aerosol can comprising a body containing a propellant and an aerosol product to be sprayed, a valve whose actuation enables said aerosol product to be sprayed, and a spray head (1) which serves to discharge the aerosol product to the environment when the valve is actuated, said spray head (1) being provided with an axial borehole (3) through which the aerosol product enters the spray head (1),
c h a r a c t e r i z e d i n t h a t
the spray head (1) is provided with an adjustment device for the regulation of the discharge rate.

2. Aerosol can according to claim 1, characterized in that the adjustment device for the regulation of the discharge rate is an adjustable needle valve (5) with the tapered end (7) of the needle valve (5) terminating in a gap (8) located between axial bore (3) and outlet (9) of spray head (1), the outlet (9) being connected with the axial bore (3) via gap (8) and the tapered end (7) closes off gap (8) to a varying degree depending on the depth of penetration.

3. Aerosol can according to claim 2, characterized in that the gap (8) is situated at the inside of outlet (9) of spray head (1) and the needle valve (5) is positioned transversely to axial bore (3).

4. Aerosol can according to claim 2, characterized in that the gap (8) is located at the top end of the axial bore (3) and the needle valve (5) being positioned along the axis of axial bore (3).

5. Aerosol can according to any one of the claims 2 to 4, characterized in that the needle valve (5) can be adjusted from the outside via a thread.

6. Aerosol can according to claim 1, characterized in that the spray head (1) is equipped with a tubular element (11) with openings on both ends, said element being provided with the outlet (9) of the spray head (1) on one end and movably arranged in a recess (12) provided for this purpose in the spray head (1) such that a stationary tapered element (14) located in the axial bore (3) adjustably engages with the inner opening of said tubular element (11) and regulates the passage available to the aerosol product to be sprayed.

7. Aerosol can according to claim 6, characterized in that the tubular element (11) has a male thread (13) and can be screwed into the relevant female thread arranged in the recess (12) provided for this purpose in spray head (1).

8. Aerosol can according to claim 1, characterized by the arrangement of a lateral bore (15) in the spray head (1) located transversely to and being connected with the axial bore (3) said lateral bore (15) having an outlet on one end and accommodating a rotatable cylindrical element (16) inserted from the other end of the lateral bore (15), said element slightly overlapping the axial bore (3) and being provided at least on side with a bevel or rounding (17) which enables a flow passage (18) extending from the axial bore (3) to the lateral bore (15) to be cleared if said bevel or rounding (17) is positioned over the axial bore (3) by suitably turning the cylindrical element (16).

9. Aerosol can according to claim 1, characterized in that in the spray head (1) a lateral bore (15) is arranged transversely to and being connected with the axial bore (3), said lateral bore being closed off on one end and accommodating a movably inserted tubular element (20) open on both ends and having the outlet (9) of the spray head (1) located on one end, and with said tubular element (20) in inserted state being positioned over the axial bore (3) and, on its end covering the axial bore (3), provided with a bevel or rounding (22) that reduces the cross-sectional area of the tubular element (20)

in the direction of the closed end of the lateral bore (15), with the axial bore (3) being provided with a projection (30) at the side of and extending into the closed-off end of the lateral bore (15), said projection being adjacent to the bevel or rounding (22) of the tubular element (20) so that depending on how far the tubular element (20) is inserted into the lateral bore (15) a flow passage (23) of variable size is created between the bevel or rounding (22) and the projection (30) with said passage forming a connection between the axial bore (3) and the inner opening of the tubular element (20).

10. Aerosol can according to claim 9, characterized in that the tubular element (20) can be slidably inserted into the lateral bore (15).

11. Aerosol can according to claim 9, characterized in that the tubular element (20) can be inserted into the lateral bore (15) via a threaded joint.

12. Aerosol can according to any one of the claims 1 to 11, characterized in that spray head (1) is provided with a rotatable or slidable element (25) having one or several openings (26, 27) which can be moved in front of or into outlet (9).

13. Aerosol can according to claim 12, characterized in that the rotatable or slidable element (25) has several openings (26, 27) of different cross section.

14. Aerosol can according to claim 12 or 13, characterized in that one or several openings (26, 27) are shaped in the form of circular and/or fan-type nozzles.

15. Aerosol can according to any one of the claims 12 to 14, characterized in that the rotatable or slidable element (25) has one or several openings (26, 27) whose cross section varies depending on its position in front of or in the outlet (9).

16. Spray head according to claim 1, characterized in that an elastic element (34) is in contact with axial bore (3) with the cross section of said elastic element (34) reducing when force is exerted on the elastic element (34) along the axial bore (3) and increasing transversely to the axial bore (3) such that said elastic element (34) moving at least partially into the cross section of axial bore (3) causing said cross section to become constricted.

17. Spray head according to claim 16, characterized in that the elastic element (34) extends circularly around axial bore (3).

18. Spray head according to claim 16 or 17, characterized in that the spray head (1) consists of a top part (31) and a bottom part (32) with the elastic element (34) being fitted in a clearance between top part (31) and bottom part (32) and the force acting on said elastic element (34) thus constricting axial bore (3) is exerted by moving top part (31) and bottom part (32) towards each other.

19. Spray head according to claim 18, characterized in that the top part (31) and bottom part (32) of spray head (1) are joined by means of a thread and the distance between top part (31) and bottom part (32) is adjustable by performing a rotating movement counter to each other.

20. Aerosol can according to any one of claims 1 to 15, characterized in that the aerosol product to be sprayed is a varnish, a painting preparation agent or other coloring substance.

21. Spray head, characterized in that said head can be used as part of an aerosol can according to any one of the claims 1 to 20.